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THE USE OF ELECTRONIC TICKETING IN THE TRANSPORT FIELD

A few words about user protection and the liability of the parties

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I. INTRODUCTION

Nowadays, the transport industry is more and more looking forward to using new technologies as a way of improving mobility. Among the different possibilities offered, it is more common to use, whatever the type of transport, the contactless smart card, reloadable or not, as a method of payment, a user identification, and in some cases as a title of transport (hereinafter the electronic ticket)[1-2]. The electronic ticket should, among others, offer to carrier savings in ticket distribution costs, revenue accounting and billing processes, and in the reduction of handling costs associated with paper tickets. From a user point of view, it should provide an easy, quick and efficient way to pay. Moreover, the user should be able to use his card for the broadest type of transport wherever he is.

The use of an electronic instrument (generally a smart card) raises many legal questions[3]. In the following lines, we will confine our analysis to a first overview of the legal question related to user protection and liability that may appear by adopting and developing the multimodal use of smart cards.

Such an analysis may of course not be conducted without a reference to the Commission Recommendation concerning transactions by electronic

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1 The notion of electronic ticket is very broad. By electronic ticket, we mean the use of any type of electonic money instrument (as it will be defined hereafter) for the purpose of replacing the actual paper ticket actually used in the transport field. We will mainly concentrate our attention to new technological developments and particularly to the broadest expected use of the contactless smart card.

2 See for example the EC funded project Calypso, presented as a bridge between transport, bank and service operators to simplify the citizen's life. More information can be found on the web site http://www.calypso.tm.fr.

3 See for example in the field of Privacy, Jean-François LEROUGE, « Road tolling and privacy. Some comments with regard to the EC Directive on Data Protection.», *CL&SR*, to be published.

payment instruments[4] (hereafter the Recommendation) since it apparently provides for an adequate legal regime and has been adopted to ensure a high level of consumer protection in the field of electronic payment instruments[5]. The Commission intentionally chooses to adopt a non-binding instrument[6] but clearly indicates its wishes to monitor the implementation of the Recommendation and, if it finds the implementation unsatisfactory, intends to propose the appropriate binding legislation covering the issues dealt with in this Recommendation. The Recommendation has recently been the object of a Call for Tender aimed at assessing the implementation of the Recommendation in the 15 Member States of the European Union[7]. The moment seems thus well chosen to devote an analysis to the question as to know whether the Recommendation offers a sufficient protection regarding the use of new technologies in the transport field or not.

II. THE RECOMMENDATION CONCERNING TRANSACTIONS BY ELECTRONIC PAYMENT INSTRUMENTS

As already mentioned, electronic instruments will, in the future, be more and more used as an electronic ticket or a road tolling payment system. It should not be to the detriment of a user's lack of protection. In the following lines we would like to see if we can find in the Recommendation a sufficient source of protection and, if necessary, make some proposals regarding the way it could be adopted to give a more appropriate answer to the use of such instrument[8].

A. Does the Recommendation apply to an electronic ticket ?

§1. Scope of application of the Recommendation

Following article 1, the Recommendation applies notably *to the transfers of funds, other than those ordered and executed by financial institutions, effected by means of an electronic payment instrument.* The

4 Commission Recommendation concerning transactions by electronic payment instruments and in particular the relationship between issuer and holder, *O.J.*, L.208, 02.08.1997, p. 52.

5 Recital 8 of the Recommendation.

6 Judges are however obliged to take it into consideration in order to solve litigations, notably, when this are helpful in finding the solution of litigation (CJCE, case C-322/88 of December 13, 1989, *Rec.*, 1989, p. 4407 and ff.

7 Call of Tender n°XV/99/0141/C, *O.J.*, January 16, 1999, S. 11/29.

8 Road tolling payment may take different forms. For more information, see Jean-François LEROUGE, *op.cit.*, p. 2.

notion of payment instrument is defined as an instrument enabling its holder to effect transactions of the kind specified in Article 1 (*i.e. transfers of funds and cash withdrawals*)[9]. This covers both remote access payment instruments and electronic money instruments[10]. The notion of remote access payment instrument is not relevant for our analysis[11] since it will not be the instrument used for electronic ticketing. We won't therefore take it into consideration. On the contrary, we will focus on the notion of electronic money instrument.

§2. The notion of electronic money instrument

By electronic money instrument, the Commission means a ***reloadable*** *payment instrument other than a remote access payment instrument, whether a stored-value card or a computer memory, on which value is stored electronically, enabling its holder to effect transactions of the kind specified in article 1*[12]. The electronic instrument must thus render possible the transfer of funds.

§3. A single or a multipurpose electronic money instrument ?

In application of the definition of « electronic money instrument », the Recommendation may apply to a very broad type of instruments. The definition even seems to encompass single purpose electronic instruments[13]. This could appear quite surprising since single purpose instruments might better be considered as a way to have access to a service. In consequence, the issuance of such instruments could be better qualified as the selling of a product or the performance of a service. This view could however lead to a lack of protection. Indeed, the only legal regime applicable would be the general rules applicable in this field and it does not always offer answers to the problems generated by the use of such instruments. If the transport industry decides to adopt a common specific electronic money instrument for the public transport network, such as an

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9 The term payment is not defined by the Recommendation. It may be understood as the execution of an obligation which has as object a debt of money.

10 Article 2 of the Recommendation.

11 Following article 2b, the notion means *an instrument enabling a holder to access funds held on his/her account at an institution, whereby payment is allowed to be made to a payee and usually requiring a personal identification code and/or any other similar proof of identity. This includes in particular payment cards (whether credit, debit, deferred debit or charge cards) and phone- and home- banking applications.* We have however to point out the fact that it is particularly judicious to take the notion of remote access payment instrument and electronic money instrument in the same law since one instrument can have both functions.

12 Article 2 c.

13 The distinction between multipurpose and single purpose cards may be done by using two criteria : the issuer of the card and the possibility of the use of the cards. Single purpose cards are thus generally issued by or in the initiative of merchants of goods or provider of a service.

electronic reloadable public transport subscription, it would be a single purpose one (since it is issued by a service provider). Therefore, we are satisfied to see that it seems to be included in the Recommendation[14]. We have however to recognise that, if a broad scope of application of the Recommendation is advisable for electronic ticketing (notably regarding the broad possibility of usage in all the European public transports), this is probably not the case for certain other single purpose applications such as the electronic reloadable copy card (notably regarding its limited possibility of utilisation). The Recommendation should probably be adapted to take this latest remark into consideration. Regarding such modification, it is truly difficult to recommend the choice of a criteria to separate single purpose instruments, for which the protection offered by the Recommendation is advisable, from those for which it is not. In the present case, the criteria of the scope of use of the single purpose instrument seems to be adequate. As explained, in the transport field, the objective is to reach an interoperability between the European countries and networks by using common technical features. The amount of money spent by using it might be considerable. It is therefore advisable to have a legal instrument which offer protection to users and criterion for fixing liability of each parties. We will see that the Recommendation might to a certain extent offer such a legal regime.

In this regard, let us also remark that the term money is obviously badly chosen and could lead to a misunderstanding. Indeed, money must *de facto* have a legal and forced tender *(cours légal et forcé)* [15] and single or multipurpose electronic money instruments do actually not meet such requirements. Therefore, it leads some authors to estimate that value units stored electronically are not considered as money[16]. For the time being we share their opinion[17] but we think that the bad choice of the terms used

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14 See on the contrary the Commission proposal for European Parliament and Council Directives on the taking up, the pursuit and the prudential supervision of the business of electronic money institutions, available at the following address : http://europa.eu.int/comm/dgl5/fr/finances/general/727.htm. For the purpose of this proposal, the Commission conceived electronic money as a digital form of cash . Therefore, the Commission decided, without justifying it, to limit the proposal to multi-purpose electronic money.

15 See for example article 1 of the Belgian law of December 23, 1988.

16 See for example F. MOURLON BEERNAERT, « Les cartes à mémoire pré-payées : un nouvel instrument de paiement ? », *J.T.*, 1997, p. 377. See on the other side the point of view of J.-P. BUYLE, « La carte de paiement électronique », *La banque dans la vie quotidienne*, Bruxelles, Jeune Barreau, 1986, pp.458-459, n°3.

17 In the same direction, see X, « Aspects juridiques de la banque électronique » (rapport du conseil national du crédit et du titre sur la « Banque électronique », août 1997, *Computer & Telecoms Law review, 1998/2*, p. 92. In our view (…) *Pour que l'on puisse parler de nouvelle forme de monnaie, la monnaie électronique, il faudrait que celle-ci présente toutes les caractéristiques d'universalité, d'acceptabilité, de transférabilité. (…) Il est cependant concevable que le signe électronique stocké sur le support acquière un jour le statut de monnaie à part entière. Son utilisation aurait alors un effet libératoire immédiat. Le commerçant recevant le signe électronique ne chercherait pas à faire créditer son compte en monnaie scripturale mais la réutiliserait pour des transactions*

should not have as a consequence to limit the scope of application of the Recommendation. One can however wonder whether it is pertinent to choose one text to regulate different means of payment. Or is it better to separate the systems according to their technical and legal characteristics ? The question is not a new one[18]. We personally think, and we will try to demonstrate it in the following lines, that it is advisable that a single legal regime (with common guidelines) should be adapted.

§4. The notion of «issuer»

In application of the Recommendation, the « issuer » of an electronic money instrument is a *person who, in the course of his business, makes available to another person a payment instrument pursuant to a contract concluded with him/her*[19].

Following the definition, some remarks might easily be advanced. One can first wonder who will be considered as the issuer if one person (such as a public transport company) asks, in the course of his business, another person (such as a credit institution[20]) to issue an electronic money instrument for offering it to its clients[21]. Indeed, in our example, the person who will make the payment instrument available to the user will be the public transport company. Since in that example, the credit institution seems better placed to meet the requirements of the Recommendation, one would be tempted to conclude that the definition seems inappropriate. Indeed, for the user of the electronic money instrument, the issuer is only the public transport company since it is the only interlocutor. One would therefore recommend, when adopting a EC law, to adapt the Recommendation to take it into consideration.

Different possibilities of adaptation are conceivable :

- The EC law could impose that all the companies participating in the issuance of the instrument be jointly considered as issuer[22] ;

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ultérieures. La monnaie électronique serait autonome par rapport aux autres formes de monnaie. Ce cas de figure paraît, encore une fois très théorique et envisageable uniquement à long terme.

18 See X. FAVRE-BULLE, *Le droit communautaire du paiement électronique,* Schulthess Polygraphischer Verlag Zürich, Zürich, 1992, p. 82 and f.

19 Article 2 (e) of the Recommendation.

20 For the clarity of our study, we will hereafter only speak about credit institutions but note that it might be a bank or any other financial institution.

21 For example, in the airline industry, it is expected that most airline smart cards will be « co-branded » cards, which means they will be issued by banks or credit card companies, and will also contain the airline industry applications. For further details, see the IATA Web site on http://www.iata.org/eticket/eticket.htm.

22 Regarding a precedent version of the Recommendation, Van Esch already pointed out that *the Recommendation does not provide for the case where a card is issued jointly by e.g. a credit card company and a bank. Who is the issuer in that case : the bank or the credit card company, or both ? The answer to this question is particularly important in matters concerning liability for*

- The EC law could impose to «issuers» (according the Recommendation and in our example the transport company) to conclude a contract with a credit institution mentioning the obligations the credit institution has to fulfil to enable the issuer to comply with the obligations actually stated in the Recommendation ;
- The obligations stated in the Recommendation might also be respected via rules imposed to any person directly involved in the issuance of the electronic money instrument (i.e. the credit institution in charge of the « manufacturing » of the card).

As another remark, we can point out the fact that the Recommendation does not provide conditions to comply with the issuance of electronic money instruments. Such conditions are however particularly important since it provides further protection to the user of the instrument. The European Commission has been conscious of their importance and has adopted a proposal for European Parliament and Council Directive on the taking up, the pursuit and the prudential supervision of the business of electronic money institutions[23]. Unfortunately, this proposal clearly applies only to multipurpose cards[24]. In addition, electronic money is defined in such a way as to cover prepaid cards and network money, however, only if issuance is within a 3-party system, i.e. if the electronic monetary value is accepted as a mean of payment by undertakings other than the issuance institution(s)[25]. It is therefore difficult to consider that the proposal provides for an adequate legal regime for the issuance of all electronic money instruments. On the contrary, we can underline the fact that the Commission, by adopting its proposal, introduced legal doubt regarding its wish to offer a protection to single purpose electronic instrument. We have already underlined, and we will try to continue to demonstrate it in the following lines, the fact that, in our opinion, such instrument should not, to a certain extent, fall outside the scope of a legal protection, irrespective of the terms used.

§5. Electronic money instrument : a two-function instrument

According to article 2c, the electronic money instrument must enable its holder to effect transfers of funds or cash withdrawals. The use of the term « transfers of funds » is particularly regrettable with regard to its

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damage resulating from loss or theft of the card or malfunction of the system. In such events, would there be a case of several liability ? (R. VAN ESCH, Payment Systems : the EC Commission's Recommendation, in *: International Financial Law Review*, July 1989, p. 30).

23 *Op. cit*, note 13.

24 See the Explanatory Memorandum, point 3 : « Multi-purpose pre-paid card » : *This proposal is concerned only with multi-purpose electronic money.*

25 Article 1, 3b of the proposal.

definition. So, for example, Thunis[26] estimates with reason that the *account* plays a central role in the electronic funds transfer operation. If one retains such a view, the Recommendation will not apply when the electronic money instrument is used for operations others than those relating to the loading of the instrument (i.e. for the payment of a service), what, of course, is absurd specifically if one looks at article 1§2 of the Recommendation. This article establishes indeed a distinction between the operation carried out to load (and unload) value through remote access to the holder's account and those that did not[27]. Electronic money instruments has indeed two functions:

1. a function of access to the account (hereafter the *access function*, which allows for example the loading of the card) and;
2. a payment function which does not need the use of an account (hereafter the *non-access function*, for example the transfer of stored monetary value for the purpose of paying the use of the metro).

As a matter of fact, we will later come back to this important distinction imposed by the Recommendation.

§6. Conclusion with regard to electronic ticket

Since the notion of single electronic instrument is included in the definition of electronic money instruments (despite the doubt created by the proposal on the taking up, the pursuit and the prudential supervision of the business of electronic money institutions), the Recommendation may apply to instruments such as smart cards used as electronic ticket for transport. A distinction must however be done between reloadable and non-reloadable electronic money instruments for which no legal regime is foreseen because they fall outside the scope of application of the Recommendation. Hereafter, we will therefore concentrate on reloaded electronic instruments.

B. The reloadable electronic money instrument

The Recommendation is divided into two important sections. The first one deals with the transparency of conditions for transactions. The second one is devoted to the obligations and liabilities of the parties to a

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26 X. THUNIS, « Recent trends affecting the bank's liability during electronic funds transfer operation », *R.D.A.I.*, n°7, 1991, pp. 947 and f.

27 Regarding this, the definition of electronic money instrument provided by the European Central Bank Report seems easily most appropriate. According to it, an electronic money instrument *is an electronic* ***store of monetary value*** *that may be widely used for making payments to undertakings other than the issuer* ***without necessarily involving bank accounts in the transactions, but acting as a prepaid barrier instrument****. (European Central Bank, Report on Electronic Money, August 1998, p.7.).*

contract. A first quick reading of the Recommendation gives the impression of a comprehensive protection. In reality, in each of those two sections, some paragraphs do not apply to transactions effected by means of an electronic money instrument except when such instruments are used in the loading/reloading function (i.e. where there is an access to the account[28]). Therefore, the protection offered will depend upon the function of the instrument.

In some electronic ticketing projects[29], the electronic chip of the smart card may contain a transport purse, a link to a central account, a public transport pass and a log file. In such a case, the electronic money instrument has « the access function » (first function of the instrument). Therefore, the Recommendation fully applies.

In other projects, the account will only be used to reload the electronic money instrument (second function of the instrument). Therefore, in application of article 1§2, for most of the operations carried out by means of the electronic money instrument (i.e. all the operations except those where the instrument is used in its access function), many provisions of the Recommendation will not be applicable.

In this section, we suggest to briefly review the provisions of the Recommendation with a particular emphasis on those that do not apply to operations realised by electronic ticketing used in its non-access function. Information and obligations are linked. We will therefore analyse each of them in each paragraph. A first paragraph will be devoted to a general overview of the Recommendation. In a second paragraph we will highlight the illusion of the protection for the instrument used in the non access function. In the third one, we will show the real protection proposed by the Recommendation. In the last one, we will try to provide proposals to tackle the problems not solved in the Recommendation.

§1. Overview of the Recommendation - the general regime applicable to electronic money instrument used in the access function

Articles 3 and 4 of the Recommendation relate to the minimum information provided to the holder of the electronic payment instrument upon signature of any contract regarding the use of the instrument and subsequently to any transaction. Articles 5 to 8 relate to the obligations and liabilities of the holder and the issuer.

According to article 3, the issuer has, before giving the payment instrument, to provide the user with a string of information (mainly written contractual terms and conditions including at least (i) a description of the

28 Article 1§2.

29 See for example Adept II, a EU 4th framework project. More information available at the following address: http://www.trentel.org/transport/research/1142.html.

electronic payment instrument, *in specie* the electronic money instrument, (ii) a description of the holder's and issuer's respective obligations and liabilities, (iii) the normal period within which the holder's account will be debited or credited, (iv) the type of any charges payable by the holder, (v) the period of time during which a given transaction can be contested by the holder and an indication of the redress and complaints procedure available to the holder and the method of gaining access to them, (vi) information relating to the use of the instrument for transaction abroad).

Article 4 imposes upon the issuer the obligation to provide the holder with a number of information subsequently to a transaction. Conditions of forms and contents (i.e. reference enabling the holder to identify the transaction) are prescribed.

Article 5 describes the set of obligations the holder must respect. Let us quote, as an example, the obligation he has to notify to the issuer without delay after becoming aware of :

- the loss or the theft of the electronic payment instrument or the means which enable it to be used or ;
- the recording on his/her account of any unauthorised transaction or ;
- any error or other irregularity in the maintaining of that account by the issuer.

By consequence of his obligations, the holder will be held liable in a number of cases. Article 6 fix them. But article 6 also protects the holder who has been diligent and has notified the issuer as required by article 5 except where he/she acted fraudulently. So, up to the time of notification, the holder bears the loss sustained in consequence of the loss or theft of the electronic payment instrument up to a limit, which may not exceed EURO 150, except where he/she acted with extreme negligence, in contravention of relevant provisions of the Recommendation (article 5), or fraudulently, in which case such a limit does not apply. Articles 7 and 8 also provide obligations and liabilities for the issuer. We will come back to them.

§2. The lack of protection offered for electronic money instrument used in the non-access function

The obligation of information set up by article 3 applies for any type of instrument, i.e. for both functions (the access and the non-access ones) of the electronic money instrument. Most of the obligations mentioned seem very important and relevant even for an electronic ticket or road tolling badges. Let us mention particularly the information to provide with,

related to the claim and the complain procedure[30]. Such information are to be put in link with the holder's obligations.

As already explained, according to article 5(b), the holder must in principle notify to the issuer without delay after becoming aware of the recording on his/ her *account* of any unauthorised transaction or any error or other irregularity in the maintaining of that *account* by the issuer. However such holder's obligation does not exist for transactions effected by means of an electronic money instrument used in the non-access function[31].

As a consequence for electronic money instruments, and probably in order to maintain a good balance of the parties' respective obligations, the issuer of an electronic money instrument does not have to (i) ensure that appropriate means are available to enable the holder to make the notification required in case of unauthorised transactions, error or irregulatory in the maintaining of his account or (ii) to prove, in any dispute with the holder concerning a transaction, that the transaction was accurately recorded and entered into accounts. Moreover, the issuer is not obliged to provide, subsequent to a transaction, most of the information contained in article 4.

One can wonder why the Recommendation has foreseen those exceptions for electronic money instruments used in the non access function. In fact, a first « logical » explanation can easily be advanced. Those exceptions are understandable because all these obligations refer to an account and most of the application of electronic money payment are no longer carried out by the way of an *account*. An « economic reason » could therefore justify the exception: Why should « heavy obligations » be imposed upon the issuer when the electronic money instrument is used mostly for limited value payments and does not give any possible access to an account (i.e. risks are limited). Finally, we can point out a «technical» argument: it would currently be impossible, or maybe too costly, to block the utilisation of the non-access function of the electronic money instrument notably because such transaction are not performed online[32] (which is not the case for electronic money instruments using the access function).

Are those justifications sufficient enough to justify those important exceptions ? To answer this question, one has to highlight what is *in fine* the exact protection offered by the Recommendation for transactions carried by means of electronic money instrument.

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30 Article 3§3 (e).

31 Article 1, 2) of the Recommendation.

32 For a distinction between *on line* and *off line* systems, see X. FAVRE-BULLE, *Le droit communautaire du paiement électronique*, Schulthess Polygraphischer Verlag Zürich, Zürich, 1992, p.22 and f.

§3. The protection actually offered for electronic money instrument in the non-access function

The Recommendation contains only few provisions specifically applicable to electronic money instruments not linked to an account (ie. the non-access function).

· The holder's right to prior information

As already pointed out, the issuer must provide information to the holder upon signature of the contract. The contractual terms and conditions so communicated could be a while after signature of the contract modified following the conditions set up in article 7.1 (e.g. a sufficient notice of the change must be given individually to the holder to enable him to withdraw if he/she chooses so,...). Such an article has its importance: it still gives the holder the possibility to be aware of the terms and conditions of his/her contract. Maybe it should be even better to give him the right to have in addition an electronic access to such conditions, for example as a reminder, since it does not seem to really impose heavier obligations on the issuer. If the electronic world provides facilities, it should, as far as possible, be on a two-way basis. In addition, electronic information would be really helpful for airline industry since a number of government regulations, as well as the Warsaw Convention on liability, require that various « Notices » be provided to passengers[33]. The IATA (International Air Transport Association) undertook to study this problematic issue. As the Association pointed out, *most passengers still want or need a hard copy Passenger Receipt, and most airlines still have to deliver a paper Boarding Pass (…). It is not inconceivable that a smart card could be the provider of this information and might also be used at self-service kiosks to obtain the notices and necessary boarding documentation*[34].

33 On that point, see the interesting study of P. LYCK and B. DORNIC, « Electronic Ticketing under the Warsaw Convention : The Risk of « going ticketless » on International Flights », *Air and Space Law*, vol. XXII, n°1, 1997, pp. 13-29. The authors tried to demonstrate the risks that passengers with ordinary paper tickets may be treated differently from those holding electronic tickets. Let us note, however, that since the publication of this article, the Warsaw Convention has been modified (the new text has been signed in Montreal on May 28, 1999). Article 3 of the new modified convention take into consideration some of the problems identified.

The authors also remind us that the US Department of Transportation (DOT), on 19 January 1996, issued a request for airline and public comments concerning the emerging practice of electronic ticketing. *The DOT request focused generally on the importance of providing passengers purchasing electronic tickets with the same general level and timeliness of notice of certain information that is currently required for traditionally ticketed passengers.*

34 See the IATA Web site on http://www.iata.org/eticket/eticket.htm. This is also true for subsequent information.

The non-helpful holder's right to subsequent information

Article 4§2 imposes upon the issuer of an electronic money instrument the obligation to provide the holder with *the possibility of verifying the last five transactions executed with the instrument and the outstanding value stored thereon.* Let us once again notice however that the issuer is not obliged (as he is for electronic money instruments used in the access function) to provide a reference enabling the holder to identify the transaction, including, where appropriate, the information relating to the acceptor at/with which the transaction took place (article 4§1a).

One can therefore ask to what extent the possibility of verifying the last five transactions would be really helpful. It will provide the possibility to know the remaining balance. But, we can underline that the reference enabling the identification of the transaction seems particularly important, specifically when we speak more and more about the generalisation of the payment by smart card in the non access function (i.e. only payments). In a paper-based world, where it is common to receive a receipt or a ticket, one can choose to keep it for his/her own accounting or for reimbursement (what may particularly be important for tax reasons). Why would it be no longer possible in an electronic device or rather why is it possible if one uses a remote access payment instrument such a visa card and not if one chooses to pay immediately by using an electronic money instrument ? Of course the difference of treatment is justified for technical reasons. As already explained, the payment (non access function) is made *off line*. But is it sufficient to justify the difference ? Is it the law that need to adapt itself to technology or is it the technology that has to be adapted to comply with law requirement ?

Let us take the concrete example of an automatic road tolling. The driver decides to pay by the means of a contactless smart card, so using the non-access function, fixed on his vehicle. He has 1000 miles to drive. Why could he not verify the rightness of the total amount paid and how it has been calculated ? He has probably had to cross more than five tolling places and thus realised more than five transactions. It will even not be possible for him to know the total amount paid for his route and he will never have the opportunity to control the rightness of the amount so paid. Or, as another example, when we currently take the Metro, at least in Belgium, we have, for each way, a stamp on our ticket, which gives us the possibility to know when we took the metro. With an electronic money instrument, it may no longer be possible. We think on the contrary that it should be a free right of the holder. The IATA example, discussed here above also illustrates the necessity to treat paper tickets and electronic tickets in the same way.

Liability of the issuer

Article 8 §4 states that *the issuer is liable to the holder of an electronic money instrument for the lost amount of value stored on the instrument and for the defective execution of the holder's transactions, where the loss or defective execution is attribuable to a malfunction of the instrument, of the device/terminal or any other equipment authorised for use, provided that the malfunction was not caused by the holder knowingly or in breach of Article 3 (3) (a)*[35]. It was therefore normal to maintain that the issuer is liable to prove, in case of any dispute with the holder concerning a transaction made by the electronic money instrument, that the transaction was not affected by technical breakdown or other deficiency. Such principle is particularly important and permit to avoid any controversy in the burden of proof[36]. One can however remark that the issuer's obligation to prove that the transaction was accurately recorded and entered into accounts is not maintained for electronic money instrument used in the non-access function. This seems a priori unjustified. One also notices that article 7 2 c) is not applicable. Therefore, the issuer is no longer obliged to keep for a sufficient period of time, internal records to enable the transactions to be traced and errors to be rectified. Once again, one can wonder why the Commission estimated that this article did not have to be maintained for electronic money transactions. It seems evident to us that the issuer will still keep such records, simply because, in case of problems, it is in its interest to be able to prove that the loss of the amount of value stored on the instrument was not due to a malfunction of the instrument. Then, if it is also his interest to conserve the record, why is the holder not allowed to take advantage of this ? One has however to recognise that the « technical » reason might justify the difference of treatment. Again, that is a question of priority.

· Appreciation

As we demonstrated, the justification of the differential regime adopted for electronic money instruments with regard to their two functions may appear unjustified. Still, is there a lack of protection In other words is the difference understandable with regard to the justification we tried to identify in our precedent section ? The protection foreseen for operations linked with an account is easily comprehensible. The amount of money that may be the object of fraud may be high. Could we however ignore the legitimate holders'wish to keep the control of the money he spent ? The Recommendation does not provide any echo to such preoccupation. We

35 Article 3 point 3 (a) relates to the description of the electronic payment instrument.

36 One knows indeed how contreversial the burden proof may be. For more details, see for example in Belgium, J-P BUYLE, L. LANNOYE, Y. POULLET and V. WILLEMS, « Chronique de jurisprudence- L'informatique (1987- 1994) », *J.T.*, 1996, n° 39, p. 217.

can yet wonder whether it is not the price to pay to attract the customer's confidence to such payment. In addition, we are not persuaded that, in the future, « electronic money instrument » will still be for limited value payment.

The technical issue is more complex. We have underlined that it was a matter of priority. It is often heard that a too strict legislation is an obstacle to the technical development. The argument has its importance. But law does not have to be the prisoner of the technology. What today is an obstacle because it is, for example, too costly, may not be one in the future. Law may contribute to a better development of technology, better adapted to meet citizens' wishes. Sometimes, it might thus be recommendable to apprehend future developments. In the case at hand, it seems to be more and more evident that electronic money instrument will become one of the most common way to pay our purchases. It seems therefore important to relaunch the discussion….

The brief overview of the Recommendation already gives us the feeling that it might be recommendable to apply all the provisions of the text to both functions of electronic money instruments except maybe for certain single purpose applications with a limited scope of use (such as an electronic copy card, only valid in a limited number of company). So understood, it might provide for an adequate source of inspiration for the adoption of a Directive (in the case the implementation of the Recommendation was judged unsatisfactory). We have however already identified some lack or imprecision in the terms chosen. Any new legislative instrument should carefully take care of the terms chosen by envisaging the different possible utilisations of electronic instruments. In the following section, we will try to identify measures that could be inserted or points that should be adopted to better answer to the new applications of electronic money instruments (and *in specie*, the use of them as a method of identification).

§4. Questions non regulated by the Recommendation

In the following lines, we would like to insist on five different points. Firstly, we think it is important to fix a period of the record conservation. Secondly, we think it would be advisable that some provision be adopted to avoid fraudulent imitation of the cards issued. Thirdly, we would like to point out one consequence of the use of the electronic money instrument as a title of transport and an identification mean. We will also insist on the necessity of a good interoperability (4°). Finally, we will say a few words about self service kiosks.

1° *The period of conservation of the records*

In our precedent section, for operations realised by electronic money instruments without link to an account, we have pleaded for an extension of the obligation to keep records, for a sufficient period of time, to enable the transaction to be traced and errors to be rectified. This renders heavier the obligation imposed upon issuers. As a compensation, to comply with the data protection Directive[37], and to avoid the issuer to have to keep an unlimited amount of data for an unlimited period of time, we would recommend to fix a short period of conservation e.g., ten days. By consequence, the holders' right of action should also be limited.

2° *Avoid fraudulent imitation of the cards issued*

The number of cards issued will be multiplied in the future. In such a context, it might be interesting to insert in the legislation a provision which states that the issuer is obliged to certify his/her payment instrument and to take all possible technical measures (obligation to use all reasonable means) to render practically impossible to fraudulently imitate the instrument. In case of fraudulent imitation, the issuer should support it. Such a view is in the direct line with a recent Commission Communication[38].

3° *The use of the electronic money instrument as a title of transport and for identification purposes*

The use of electronic money instrument as a transport title and for identification purposes raises the question of the adequacy of the balance established by the Recommendation between the issuer and the holder obligations and liabilities.

We can perfectly imagine that tomorrow issuers will offer an instrument that also allows the identification of its owner (i.e. via biometrics applications). In other words, the technology could in the future be able to detect any fraudulent usage by a non-authorised person. If the link between the owner and the card is clearly established, we can wonder if the notification procedure (and the holder's limit of liability up to an amount of 150 Euro) is still needed and justified since the identification

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37 Directive 95/46/C.E. of the European Parliament and the Council of October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, *O.J.*, n°L281/31, of November 23, 1995. See in particular article 6 (1) (e) of the Directive which imposes to keep data for a period of time no longer than is necessary for the purpose of which the data were collected or for which they are further processed.

38 Commission Communication to the European Parliament, the Council, the European Central Bank and the Economic and Social Committee of July 1, 1998 : « A framework for action on combatting fraud and counterfeiting of non-cash means of payment, available at the following address : http://europa.eu.int/comm/dg15/fr/finances/general/590.htm. See specifically article 2b) and Annex 2 : Actions to prevent fraud from occurring.

purpose should render the use of the card impossible by anyone else. If it is not the case, the issuer should therefore assume some kind of liability since it warrants that the instrument functions as an identification means. Other obligation (i.e. the right of information) would of course not be affected by such revolution.

In addition, other cards would necessarily be maintained. Indeed, it would be still interesting to have an instrument that can be loaned or given to other persons[39].

4° *Interoperability*

One of the objective of electronic money instruments in the transport field is to provide the user with the possibility to use his/her electronic money instrument wherever he/she is. It appears therefore particularly important, specifically for single purpose instruments, to adopt a legal text fixing common technical feature in the issuing of such instrument to permit a minimum of interoperability inside Europe.

5° *The creation and the generalisation of self service kiosks*

We have already insisted on the importance of the information provided to the user[40]. The creation and the generalisation of self service kiosks should facilitate an up-to-date user's information. The creation of an obligation to offer such kiosk services should indeed easily help the user to verify its transaction and if necessary to contact as soon as possible its issuer in case of problems.

III. THE NON RELOADABLE ELECTRONIC MONEY INSTRUMENT

As already mentioned, non-reloadable payment instruments do not fall within the scope of application of the Recommendation. Is the distinction between reloadable and non-reloadable instruments justified ?

A priori, we think it is justified, even for multipurpose instruments, not to have the same protection than for reloadable instruments, since non-reloadable ones have by definition a more limited scope of application and a shorter life time. Let us agree together. The rightness of the distinction is not based on the fact that non-reloadable cards are generally single-purpose ones. We have indeed briefly demonstrated in our precedent section that

39 For example in case of road tolling, it is particularly interesting to keep an instrument of payment per car without having to take into consideration the person who is driving.

40 See section 2, point B §3.

such a criterion was not adequate. As Mourlon Beernaert said, « *le champ d'application forcément plus important des cartes à usage multiples ne justifie pas en lui-même et à lui seul, une qualification différente et un traitement distinct de ce type de cartes et des cartes à usage unique ou limité* »[41]. On the contrary, let us remind that, we have tried to demonstrate that a reloadable single purpose electronic money instrument might have a broad scope of application.

The non application of the legal regime could however generate the risk that many issuers decide to issue non reloadable cards only to avoid the coercion of the legal regime. The advantage of the loading possibility could limit such temptation. In addition, one could perfectly imagine to limit the use of non reloadable cards to a maximum amount of money (e.g.130 EURO). By consequence, the multiple advantages generated by reloadable cards might balance the coercion established.

IV. CONCLUSION

The aim of our study consisted in analysing the question of whether or not the Recommendation provides sufficient protection with regards to the use of electronic money instruments in the field of transport.

We have seen that the Recommendation *a priori* applies to multi-purpose and single reloadable instruments (such as an electronic ticket valid for all public transport).

As main point, we have insisted on the possibility to open the discussion regarding the abrogation of the distinction between the kind of uses of the electronic money instrument (i.e. the function of access to an account and the non-access function).

We have also tried to make some proposals to improve or adapt the legal instrument to the future development (we have notably insisted on the necessity to use the right terms and have identified some questions non regulated in the Recommendation). We hope this would be helpful in the implementation of a possible EC legal instrument….

41 F. MOURLON BEERNAERT, *op.cit.*, p.378.